

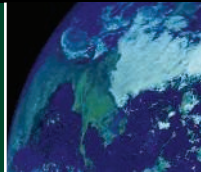
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LETTERS

edited by Etta Kavanagh

Post-Fire Logging Debate Ignores Many Issues

RECENT CONTROVERSY CONCERNING POST-FIRE LOGGING IN OREGON is emblematic of the problems of “salvage logging” globally (1). Although tree regeneration after disturbances in forested areas is important (2–4), a narrow view of this issue ignores important ecological lessons, especially the role of disturbances in diversifying and rejuvenating landscapes. Scientific advances in recent decades demonstrate that disturbances are not catastrophes, trees in these landscapes are not wasted if they are not harvested, and post-fire logging is not forest restoration (5).

Fires (6), floods (7), volcanic eruptions (8), hurricanes (9), and



Two views of forests after the Biscuit fire of 2002 in the Siskiyou National Forest, southwest Oregon: (left) unlogged botanical reserve with legacy trees present and (right) adjacent logged area with legacy trees removed and soils damaged (blackened areas) by burning of logging slash. [Photos taken November 2005.]

insects (9) create and sustain the structure and composition of forests; disturbed areas also support species that are rare or absent from closed-canopy forests, including many that are restricted to recently burned areas (6). The extraordinary habitat mosaics of southwest Oregon’s Biscuit fire area (10) and characteristic post-disturbance communities present in forests throughout the world (11) are in large part due to periodic “catastrophic” disturbances. Relative to naturally disturbed forests, intensively managed forests and plantations lack biological legacies, including intact understory vegetation, snags (standing dead trees) and logs, and patches of undisturbed or partially disturbed forest (11). Additionally, the het-

erogeneity associated with natural disturbances typically includes areas of low tree density and high shrub cover (12), which results in structural complexity required by many elements of the forest biota (13).

Ecological damage caused by post-disturbance logging may outweigh short-term economic benefits. If conducted improperly, timber harvest of any kind damages soils and below-ground processes, spreads invasive species, increases sediment delivery to streams, and destroys or degrades key environments for terrestrial and aquatic species. With post-disturbance logging, however, these impacts occur when forest recovery is most vulnerable to the effects of additional, especially anthropogenic, disturbances, creating cumulative effects not associated with logging in undisturbed forests (14, 15). Such effects can extend for a century or more, because of the removal of long-persisting and functioning biological legacies (11). Moreover, a focus on post-disturbance logging will divert the attention of forest managers from conducting legitimate fuels reduction in fire-prone areas by, for example, thinning overly stocked trees and undergrowth, especially within at-risk rural communities, thereby exacerbating the already existing problem of declining local agency staffing and budgets.

The effects of post-disturbance logging require careful consideration of whether to log at all, and if so, how to conduct such logging to minimize negative consequences. If we must conduct post-disturbance logging for timber production, stringent ecological safeguards must be in place to minimize impacts to terrestrial (14) and aquatic (15) ecosystems. When viewed through an ecological lens, a recently disturbed landscape is not just a collection of dead trees, but a unique and biologically rich environment that also contains many of the building blocks for the rich forest that will follow the disturbance.

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Preventing HIV/AIDS in Adolescents

I WAS PLEASED TO SEE THAT THE UNITED Nations Population Fund (UNFPA) is cooperating with the Interreligious Committee in Honduras without compromising its own principles, particularly as regards the effectiveness of condoms in fighting HIV/AIDS

(“Mission possible: integrating the Church with HIV/AIDS efforts,” J. Cohen, Special Section on HIV/AIDS: Latin America & Caribbean, 28 July, p. 482). UNFPA has taken on a special mandate to work with the world’s staggering numbers of adolescents who need scientifically based information and the wherewithal to make responsible decisions.

In 2002, Lois Abraham and I started 34 Million Friends, a grassroots organization that raises money and awareness of UNFPA (*I*). I have witnessed UNFPA youth centers in Mali and Senegal where the young are enticed by sports and perhaps a cyber cafe and then are deluged with information and peer counseling about sexual matters. Lois has witnessed the same dedication toward AIDS prevention in Nicaragua. The Bush Administration has withheld \$34 million from UNFPA every year since 2002 and touts “abstinence only” policies abroad, which do not take into account forced early marriage of girls to older, more sexually experienced men and often their need to trade sex for food or school tuition. The United States should fully support the UNFPA in its human rights–based work for sexual health. UNFPA works

in 140 countries at their invitation. Last year, 171 countries contributed to UNFPA, but not the United States. For shame!

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Reference

1. See www.34millionfriends.org.

On Purpose in Conservation

THE EMPHASIS ON THE PRESERVATION OF biodiversity as the objective of conservation (“Global biodiversity conservation priorities,” T. M. Brooks *et al.*, Review, 7 July, p. 58) has three distressing faults.

First, species contain ecotypes that are unique to their locales. As the range of the species is restricted, ecotypes are lost and the functional integrity of the natural communities in that region suffers. Although the ecotypes may be reproducible over many generations from a population residual in a protected “hot spot,” the reproduction is not guaranteed and is certain to be slow.

Second, the very best efforts in preserving species in parks will be defeated if we allow the environment to erode out from